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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/962,971	10/27/1997	NABIL N. GHALY	1025-002P/JA	9524
7590	08/10/2006		EXAMINER	
DR. NABIL N. GHALY 14 LONGWOOD DRIVE S. HUNTINGTON, NY 11746			CROSS, ALAN	
			ART UNIT	PAPER NUMBER
			3713	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	08/962,971	GHALY, NABIL N.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Alan Cross	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 19 June 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 83-96,98-105 and 107-129 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 83-96,98-105 and 107-129 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 June 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/19/06.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### **New Matter**

**Claims 83-96,98-105, 107-129 are rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material, which is not supported by the prior patent, is as follows:**

In applicant's amendments to the specification, the Examiner considers the following items as numbered by Applicant to be new matter.

1. Item 2, "or the states of the routing squares".
2. Items 8, 10, 11 "or the state of the associated routing square" and "or the state of the second/corresponding routing square"

Applicant does not appear to have support for these new limitations.

3. Item 9, "EXCLUSIVE NOR"

The Examiner notes that the EXCLUSIVE NOR function is different than the INCLUSIVE OR function.

4. Item 12, "As would be obvious to a person skilled in the art, there is almost unlimited number of ways to assign the generated color codes to playing positions. For example such assignment could be based on a fixed relationship between generated color codes and playing positions. It should also be noted that a solution to a game, where the objective of the game is to provide the same color or image at all playing positions, is independent of how color codes are assigned to playing positions."

While the Applicant would consider the above statement obvious, he did mention it in the original specification and cannot now add the matter.

5. Item 14, "It should be noted that while the above description of the operation of the preferred embodiment employs bi-stable switches to control the routing squares, a routing square could be activated by a keypad switch, i.e. a momentary switch, to toggle it between its two states indicated in Figures 2a & 2b. In such a case, the states of a routing square, rather than the states of the bi-stable switch, are used to provide the various functions described in the preferred embodiment. It should also be noted that the number of colors or images playable by a device is a design choice. The color codes in the 4x4 embodiment could be assigned to any pre-defined number of visual indications, i.e. to any pre-defined images or colors, including the color reflected from the surface of a display when it is dark. For the 4x4 embodiment, a person with ordinary skills in the art could employ such assignment to operate the device with 2, 3, 4, or 5 colors or images. Similarly, for the 8x8 embodiment, the number of colors or images could be 2 to 9."

While Applicant did state the use of a keypad switch in his originally filed claims, it was not mentioned in the specification. In Applicant's litigation over his patent, the court concluded that Applicant had only bi-stable switches and did not have a momentary switch. The Examiner agrees with the court and notes that a keypad switch does not have a specific definition and as explained throughout Applicant's specification the only type of switch that the keypad switch could be is a bi-stable switch. Therefore,

the Examiner notes that since Applicant never previously mentioned a momentary switch, he cannot now add this new matter into the specification.

Applicant also has added information regarding the color codes of the device, which he states are a design choice. While this may indeed be a design choice it is also new matter since Applicant did not have support for this matter in the originally filed specification.

With respect to the claims, the Examiner notes that many of the limitations do not appear in the originally filed specification and are considered new matter. A list of some, but not all of the new matter limitations are:

Claims 83, 100, 111, 126: a playfield (not reference in the specification to a specific item), indicators.

Claims 105, 111: a cursor control switch mechanism/structure.

Claim 111: a touch screen.

None of these aforementioned claim limitations appear to be supported in the original patent. The Examiner asserts that besides these few mentioned claim limitations none of the other claim limitations have support in the original patent until the point at which Applicant will clearly illustrate the support (See response to Amendment below).

The Examiner notes that Applicant is NOT allowed to look in hindsight to items that may have been around when Applicant's invention was made, and now attempt to claim them when Applicant clearly had not thought of these items when writing his original claims and specification. While Applicant is entitled to broaden his original

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patent claims in a reissue application, Applicant is only allowed to broaden the claims with respect to the subject matter disclosed by the original patent. These new matter rejections stand where they are not supported in the original.

***Response to Amendment***

It is noted that claims 83,87,90-92,96,100,102-103,109-111,114,116,126,127 have been amended and claims 128 and 129 have been added, and the specification and drawings have been amended.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). **The drawings must show every feature of the invention specified in the claims.** Therefore, the newly added claim features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 83-96,98-105, 107-129 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the originally patented claims, does not reasonably provide enablement for new claims 83-129.**

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. For example, the new claims add much new terminology to the patent that is not supported in the original specification such as playfield, indicator, diodes, cursor control, etc. One of ordinary skill in the art at the time the invention was made would not be able to make or use the invention as claimed since it is not exactly clear how the new claim language corresponds to the originally filed specification. For

example, it would take one undue experimentation to determine how to implement a cursor control aspect of the game as is now being claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 83,93,96,100,111,126, and 127 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 83, 100, 111, 126, 127 recite "...and determining if a predetermined objective of the game is met". What is the objective of the game? The claims do not state what the objective is, so it is unclear how one can determine when the objective is met? Therefore the claims are indefinite.

Claim 93 recites the limitation "the control program". There is insufficient antecedent basis for this limitation in the claim. Independent claim 83 on which claim 93 depends just states "a control logic" not "a control program".

Claim 96 recites the limitation "the activated keypad switch". There is no antecedent basis for "the activated". When and how was the switch activated? The claim does not say.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 83-85, 88, 90, 91, 93, 95, 96, 98-104, 107-110 and 126-129 are rejected under 35 U.S.C. 102(b) as being anticipated by Parker Brother's "Merlin".** Merlin is an electronic gaming device comprising a housing. It has a playfield that includes a plurality of playing positions, wherein each playing position includes an indicator that provides a plurality of visual indications. Keypad switches, i.e. buttons are used to activate the playing position. It is inherent to the gaming device that a microprocessor controls the operation of the device. Control logic is executed on the processor that assigns a first set of binary numbers to playing positions on the playfield; routes binary numbers respective to an activated playing position to each other; generates a second set of binary numbers from the first set of binary numbers using a Boolean function and assigns the second set of binary numbers to indicators on the playfield to provide visual indications and determines when the objective of the game is met (See Merlin, Magic Square) [claims 83, 100, 101, 103, 104, 111, 112, 126, 127]. For example, when the lights are off, the square has the binary number 0 associated with it, when a player depresses a button, the light will turn on and have the binary number 1 associated with it. Also when the player presses the button, other binary numbers are generated for the other indicators. For example, when a player presses one indicator, other indicators will turn off, therefore they have been routed a binary number, i.e. 0. The keypad switch and indicator at each playing position are provided by an illuminated keypad switch (See Merlin) [claim 84]. The keypad switch is illuminated using light emitting means (See Merlin) [claims 85, 115]. The plurality of visual indications includes at least one

illuminated color and a color reflected from the surface of the indicator when the keypad switch is dark (See Merlin) [claims 88, 116]. The gaming device has means for generating visual and audible effects during game play, and at the conclusion of a game (See Merlin) [claim 90]. It is inherent in the gaming device that it includes a segment of control logic executed on the processor that provides a plurality of games by varying the assignment of the first set of binary numbers to playing positions (See Merlin) [claims 91, 102, 113]. For example, different magic square games are generated based on the game program. A plurality of games are stored in a data section of the control program wherein each game is defined by a different assignment of predefined binary numbers to playing positions (See Merlin) [claim 93]. The shape of the housing is in the form of a three-dimensional configuration and the plurality of playing positions are mapped on the surface of the three-dimensional configuration (See Merlin) [claims 95, 125]. The segment of control logic that routes binary numbers to each other includes an algorithm that routes binary numbers assigned to the playing positions at the top, bottom, left and right of the activated keypad switch, to each other (See Merlin) [claim 96]. For example, when a player presses one switch, on, other switches around that switch go off. The first set of binary numbers is generated randomly or may be predefined and stored as program data in a data section of the control program (See Merlin) [claims 98, 99, 107, 108, 123, 124]. The means to assign the second set of binary numbers to indicators includes an algorithm that employs the dynamic routes of the routing squares on the playfield (See Merlin) [claim 109]. The means to assign the second set of binary numbers to indicators is based on a fixed assignment, wherein the elements of the

second set of binary numbers as assigned to the same indicators during game play (See Merlin) [claims 110, 114]. It is inherent that Merlin would have a algorithm to stimulate the operation of mapping the random binary numbers to the keypad and in response to the users commands. [claim 128,129] It is furthermore inherent in the game of Merlin that it contains a computer program embedded on a computer readable media.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 87, 89, 105, 111-116, 119, 121-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker Brother's "Merlin".** Merlin discloses all of the limitations mentioned above. Merlin further discloses that the plurality of visual indications include a plurality of images, and a visual indication resulting from the absence of an image at a playing position (See Merlin) [claims 89, 121, 122]. Merlin lacks in specifically disclosing a liquid crystal display, a cathode ray tube, a digital light processor screen, touch screen and a plasma screen. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any type of display mechanism. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use any of the aforementioned displays or a cursor control switch mechanism because Applicant has

not disclosed that the particular displays or input devices, are used for a particular purpose, provide an advantage, or solve a stated problem. One of ordinary skill in the art, furthermore, would have expected Merlin to perform equally well with any of the displays and buttons because they all perform the same function of displaying the game and inputting information. Therefore, it would have been *prima facie* obvious to modify Merlin to obtain the invention as specified in the claims because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Merlin [claims 87, 105, 111, 119].

**Claims 86, 117, 118 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker Brother's "Merlin" in view of Sinclair, U.S. Patent No. 4,513,973.** "Merlin lacks in disclosing that the light emitting means are multi-colored light emitting diodes. Sinclair teaches of an electronic game in which light emitting means are provided using multi-colored light emitting diodes (See Sinclair col. 3 lines 48-51; col. 4 lines 55-65) [claims 86, 117, 118, 120]. It would have been obvious to use multi-colored light emitting diodes in Merlin game so as to provide different challenges with different colors and to be aesthetically appealing.

**Claims 92, 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker Brother's "Merlin" in view of Skowronski et al., U.S. Patent No. 4,809,979.** "Merlin" lacks in disclosing varying the difficulty level of play. Skowronski teaches of an electronic puzzle device where means are provided to vary the difficulty level of play in a plurality of games (See Skowronski et al., abstract) [claims 92, 94]. It would have been obvious to one of ordinary skill in the art at the time the invention was

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made to vary the difficulty level in the game of Merlin so that players are challenged during game play. Players can get board very quickly with games when they are not challenged so it is obvious to have different game levels so that players can play the game longer since it will take them longer to master the game.

### ***Response to Arguments***

Applicant's arguments filed 6/19/2006 have been fully considered but they are not persuasive. The rejection of new matter still stands, the items argued are not in the originally filed specification and are considered new matter. The applicant has admitted that the INCLUSIVE OR was supposed to be expressing EXCLUSIVE NOR. From this statement it renders the device inoperative because INCLUSIVE OR is a different function than EXCLUSIVE NOR. The patent law permits an applicant to be their own lexicographer but when using a term that is well known in the art and is a standard Boolean function an applicant cannot change the definition.

In regards to item 12, the applicant admits that it is obvious to a person skilled in the art. From this admission one would inherently understand how to color code-playing positions. This is not included in the original specification and cannot now be added.

In regards to item 14, while the applicant did state the use of a keypad switch a momentary switch was not mentioned in the specification. This was not contained in the original specification so it is new matter. The applicant admits that this is a design choice that is based on an inherent characteristic of the invention.

In regards to new matter limitations in the claims they still stand, a playfield and indicators were not contained in the original specification. Using a cursor control switch mechanism/structure was not contained in the original specification. A touch screen was not contained in the original specification, while the applicant points to a LCD display whereon a plurality of geometric shapes may be depicted this does not enable or describe a touch screen. It just describes a LCD display for presenting geometric shapes.

In regards to the drawings, the drawings must show every feature of the invention specified in the claims, the drawings do not show every feature of the invention specified in the claims.

In regards to the claim rejections under Merlin, in fact does assign a first set of binary number to playing positions on the playfield, and routes the binary numbers respective to an activated playing position to each other. A microprocessor controls and is controlled by binary numbers, it is inherent of the device that it would have to assign binary numbers to each of the keys so that it would map the light on and off positions and then respond to inputs from the user. Boolean functions and binary numbers are an inherent part of microcontrollers and computers. With out them a computer could not function. The binary control also has use of an algorithm, Merlin is a problem solving game essentially a algorithm for the user to figure out, for this to work the game electronics of Merlin have to employ a algorithm to provide a game for the user to solve. When the game is used it gives you a different problem each time where the game would map out binary numbers to the keypad. Using the new game option new random

numbers would be mapped to the keypad, not just another step in the game. The rejection still stands.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan

Cross whose telephone number is 571-272-5529. The examiner can normally be reached on 8-4 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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